subject	release 2.3	release 3.x
identification (optical)	9-pin Sub-D connector for service PC at CU EZ139 no difference on desk recognizable	25-pin Sub-D connector for service PC at CU EZ139 no difference on desk recognizable RAD version

cooling system	forced air current upwards in
	- converters
	- high speed rotor control
	- fan of low voltage power supply
	  (65/80kW only)
		forced air current downwards in
		- converters
		- high speed rotor control
		- fan plate underneath HT
		  transformer (R/F only)
		- fan of low voltage power supply
		  (65/80kW only)

options	no fluoroscopy	fluoroscopy possible, but generator must be an R/F version, RAD generators cannot be upgraded
systems / stands	no Thoravision or Digital Diagnost possible	
CU firmware	2 hardware PROM's	flash PROM loading via service PC
converter	6E converter up to version 4512 104 72302 the very first generators had non-coded converters with spare part #'s 4512 152 04451, the above mentioned 12NC must be ordered	7E converter versions (converter R/F 9890 000 02772) 4512 104 72311/2/3
programming	data sets RGDVx Data Set A+B **no** identical format with rel 3	data sets RGDVx Data Set A+B **no** identical format with rel 2
tubes	tube data file TUBE_R2.TDL must be used	tube data file TUBE_R3.TDL version 18.04.01 must be used
APR + film-screen combinations	no automatic assignment of APR to FSC during APR loading	during APR loading generator takes care about the FSC name or dose value
film-screen-combination screen	identical format, can be copied	identical format, can be copied
error codes	38 errors max in error log index	50 errors max in error log index
continuous rotation for 30 seconds after the last let go of the prep switch when "rotation prolongation after prep" = yes programmed	the anode stops once a desk button is pushed	the anode keeps rotating
dose correction limits	max dose correction +/- 4 steps 25%	max dose correction release 3.3 +/- 4 steps 25% release 3.5 +/- 2 steps 25%
AEC fault exposure detection	calculation based on 10 times background mAs value	release 3.3: calculation based on 10 times background mAs value release 3.5: calculation based on 9.5 times background mAs value
APR	always present	option, may not be in at low cost systems don't waste time trying to get APR programmed
CU Complete CMOS backup	file size about 170...275kB	file size about 340...710kB
serial numbers S/N	940001 ...970217	from 970218 onwards
exposure counter	# of exp. SF+LF of each tube	release 3.3: # of exp. SF+LF of each tube # of fluoro requests for R/F release 3.5: detailed exposure counter
kV_control	kV alignment only possible with parallel resistor to R226 of EZ130 either version 50 - 65/80kW	kV alignment via adjustment procedure for factor for duty cycle, factor will be memorized in CU

subject	release 2.3	release 3.x
kV_control PCB	only 4512 108 05841...5 for 50kW 4512 108 08661...4 for 65/80kW can be used feedback of DC power = E_PO and E_NG only from frontal converter EQ at 65/80kW generators with 2 converters	only 4512 108 09081...3 for 50kW 4512 108 09102...4 for 65/80kW can be used feedback of DC power = E_PO and E_NG individually from frontal EQ and rear converter E2Q at 65/80kW generators with 2 converters
rotation prolongation after prep (30 seconds continuous rotation after let go of PREP)	if any of the desk buttons will be pushed the anode brakes	anode runs for 30 seconds without interrupt
backpanel EZ	2 different backpanel versions 4512 108 05983 (tube housing temp. switch at EZX3:03-04) 4512 108 05984 (tube housing temp. switch at EZX3:06-07) replacement PCB = 4512 108 09361/2 if used for 4512 108 05983 reconnect temp. switch lines to EZX3:06-07	4512 108 09361/2 (tube housing temp. switch at EZX3:06-07)